

FOLIO

UNIVERSITY OF ALBERTA
12 JUNE 1992



INSIDE

- Chemical Engineering student Alan Ayasse gets hydrocracking
- Chalk up another one for U of A's Distance Education Program

Home Economics and Agriculture and Forestry will become one Faculty

Two departmental mergers also approved by GFC

The Faculties of Home Economics and Agriculture and Forestry will be merged to form a single Faculty, with a new name and different structure.

General Faculties Council approved the merger on 25 May. At the same time, Council approved the merger of the Department of Clothing and Textiles and the Department of Family Studies into a single department and the merger of the Department of Foods and Nutrition and the Department of Food Science into a single department.

The merger is expected to be complete by 31 March 1993.

Dean of Home Economics Betty Crown said although it wasn't the Faculty's first choice, faculty members are committed to making it work. A fair amount of work has already been done on program planning. "For the sake of students and potential students, it's important that we get on with it."

Dean of Agriculture and Forestry Ed Tyrchniewicz said from his Faculty's perspective it was certainly not a first choice. "It hadn't even entered our minds as something that we might wish to consider," he said, noting that the Faculty was in the midst of making significant changes to its undergraduate

program and had had one department, Agricultural Engineering, closed last year.

The possible merging of the two Faculties came to light in the February 1991 Document, *Maintaining Excellence and Accessibility in an Environment of Budgetary Restraint*. The recommendation was put forward by an advisory committee on restructuring to the Vice-President (Academic).

"The question that's bound to come up is 'why a merger with Agriculture?'" Vice-President (Academic) John McDonald said. "I think it would be helpful to state at the outset that there is no perfect merger or solution."

The Vice-President said the University has progressively gotten itself into a more difficult situation by adding a little bit here and a little bit there. "We have to be prepared to do the opposite on occasion. In this case, I believe we have a happy circumstance that this merger will give the possibility of exciting new things, that it will be better suited to the needs of the students and society of the future."

Dean Crown said when the Academic Development Committee and the Planning and Priorities Committee considered the recommendations, those bodies did not deal with a recommendation (put forward at GFC) to establish a target reduction for the combined unit of eight academic FTE and four support staff FTE. That recommendation to set target figures was deferred by GFC until objective criteria for the reduction are presented to and accepted by PPC, so that PPC would know what constitutes a stronger academic program. That amendment was put

forward by Graduate Students' Association President Steven Karp.

Dr McDonald said the original recommendation to set target estimates was indeed not in the initial package that went to ADC. "I was under some pressure at the restructuring committee level to set targets. We talked about what kind of savings might occur. It was my view, that, especially after talking with the two Deans, I did not want to be hemmed in by having those targets established in a precise way."

"Planning and Priorities Committee, I think quite properly, having the responsibility for budget matters, said that I couldn't get away with that and I would have to at least set a target of the expected savings," he said. The eight academic and four nonacademic positions would result in a direct savings of something over \$500,000. "I think the target is a realistic estimate of what's likely to happen," he said, explaining that the idea is indeed to achieve reductions by attrition.

President Paul Davenport said, "I would not want GFC to get the feeling as we discuss the amendment that we are somehow going to tie the hands of the Vice-President (Academic) with regard to his future recommendations on Faculty budgets. He has that authority."

Home Economics is one of the smaller Faculties on campus. It has 25 FTE academic staff and 10 nonacademic staff. Agriculture and Forestry has, after the recent budget cuts, 85 FTE academic staff and 100 nonacademic staff.

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Decision not to circulate journals will save Library \$193,600 over two years

A decision not to circulate periodicals in the (Rutherford) Humanities and Social Sciences Library, (Cameron) Science and Technology Library, Scott Health Sciences Library and Faculté Saint-Jean Library will save the Library \$193,600 over two years.

Periodicals have been "anchored" in the Weir Law Library and the Coutts Education Library for some years," Vice-President (Student and Academic Services) Lois Stanford said in a written response to concerns about the policy raised by Graduate Students' Association President Steve Karp.

At the May meeting of General Faculties Council, Karp said he was still not convinced it was a wise move. "I cannot see anchoring periodicals if there's insufficient space to use them," he said, pointing out that the large reading room is filled with students who are studying during exams rather than using the resources.

Director of Libraries Ernie Ingles said Karp is absolutely right. Ingles explained that renovations will be done. "Many of the periodicals, or parts of the periodical sets, will be moving to storage. PMC [Periodicals and Microforms Centre] is full now to the point of overflowing. The head of the HSS Library, Debbie Dancik, has prepared a plan that would clear out the outer part of PMC."

"The smaller reading room on the second floor will over the course of the summer be totally cleared away of materials. The current desk will be relocated and that area will accommodate spaces for browsers," he said, indicating that a significant portion will be used for photocopying space. "We're not going ahead with the initiative in PMC until those renovations and moves have taken place, and the photocopying has been upgraded."

"If the infrastructure isn't in place [by 1 July 1992], the 'anchoring' will simply be postponed until it is."

Ginette Rodgers, a graduate student in Nursing, said that even with more photocopiers,

there are no plans to reduce the costs. That's an additional cost for students, and that's not fair, she said.

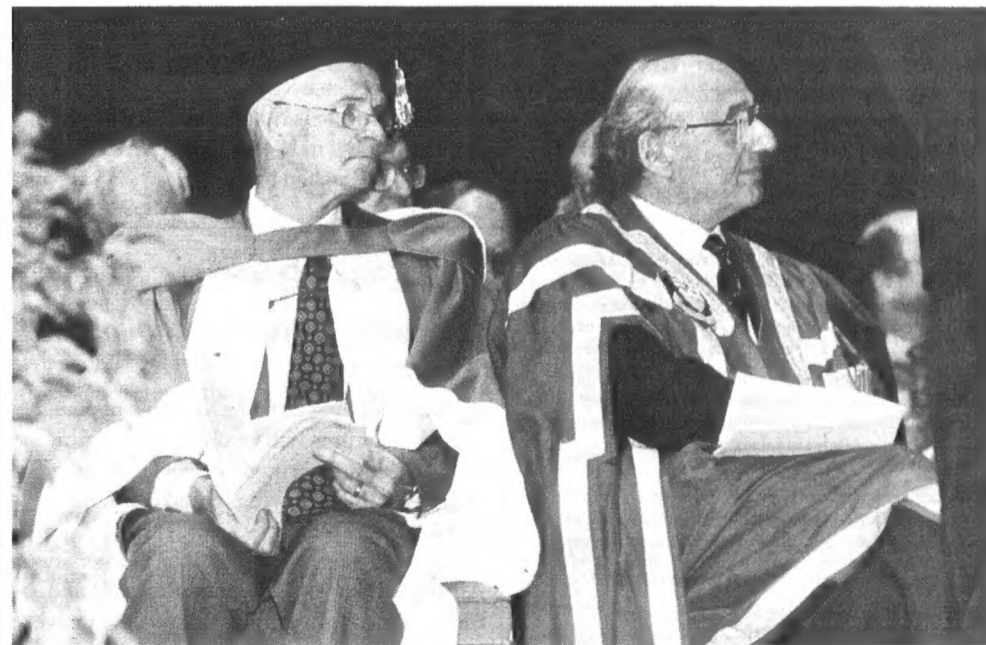
"There's no question that photocopying is being subsidized in some departments," Ingles responded. "That's not the issue in terms of the Library, I regret to say." The Library intends to purchase more photocopiers with greater capabilities. "Many of the machines in the system now require you to copy one page for one image, which means 10 cents a page. That, probably given the current technology, is unfair," he said, but the new photocopiers will have reduction capabilities to allow for two pages on a single image.

"So you really are trying to build up a slave clientele who have to use your photocopiers?" John Bertie (Chemistry) asked. Ingles responded: "No, not at all. We're trying to reduce staff costs."

According to Dr Stanford, 11 positions will be given up, seven in 1992-93 and four in 1993-94. "While the decision to anchor periodicals was taken in the context of budget reductions, arguments can be presented in support of the practice on grounds of appropriate library collections management and good service to the community: it provides increased access to the collections for the majority of the user community."

"Looking at periodicals means I'm now restricted to the hours of the Library," said Karp. He asked whether there would exceptions to the policy or an extension of the hours.

Ingles reminded GFC that the Library's hours are still either first or second in the country and would not be extended. A circulation policy is being put together to accommodate exceptions. "We understand that certain kinds of research enterprises demand looking at the materials," he said. For example, fine arts journals with colour plates will be circulated on a case-by-case basis.



Two old and dedicated friends of the University of Alberta listen attentively to Convocation proceedings. Associate Chief Justice of the Court of Queen's Bench Tevie Miller (right), a former U of A Chancellor, was on hand for the awarding of an honorary degree to a friend and colleague, Supreme Court Justice William Stevenson (left). Close to 5,000 students were awarded degrees during the six days of Spring Convocation.

Ukraine sets about building a civil service

U of A's Bohdan Krawchenko one of the principal architects

Ukraine's political pulse is racing, as the old order—totalitarianism—is shouldered aside and democracy proudly takes its place.

Now the real work begins, what Bohdan Krawchenko calls "the transformation of the state from a Leviathan dominating society into an agency implementing laws and programs passed by democratically elected legislatures." For starters, the newly independent Ukrainian state has to remove the flotsam and jetsam left by a Moscow-appointed bureaucracy that Dr Krawchenko describes as "weak and poorly trained even by Soviet standards." The legacy, he says, is "much deeper than most people imagine it to be. It all has to be recast."

It's the opportunity of a lifetime for Dr Krawchenko, Director of the Canadian Institute of Ukrainian Studies and Associate Professor of Slavic and East European Studies. Currently on leave, he's at the centre of the transformation as Director of the Institute of Public Administration and Local Government. This body was founded last month by presidential decree and the Cabinet of Ministers of Ukraine. Due in part to Dr Krawchenko's urging, the Institute and its activities are modelled on France's Nationale École Administrative. Its tasks are: 1) to educate and train public servants of the central and local governments; 2) to research and recommend policy aimed at establishing a modern civil service and improving the machinery of government; and 3) to train managers of public sector enterprises.

"The young Ukrainian state has to take basic measures such as passage of legislation laying the foundations of a politically neutral, professional civil service," Dr Krawchenko said while visiting his family in Edmonton for a few days in late May. (He's been in Ukraine since January 1991, working as an adviser to the country's government and Parliament.) That means putting into place "crash-pro-

grams" to give existing employees of the state apparatus the knowledge and skills needed to operate under new laws and a market economy.

The Institute of Public Administration and Local Government is the first of its kind in Central and Eastern Europe. Dr Krawchenko said it's proceeding with four programs:

- a 10-month Master's of Public Administration (MPA) degree program that begins this fall;
- a series of short-term courses for the staffs of Parliament, the president's administration, the central ministries, the State Duma and oblast regional governments;
- a study of comparative civil service legislation and subsequent proposal of a draft basic law on the public service by the end of October 1992;
- the training of managers for public sector companies (narrowly defined as public utilities, public transport, and large state enterprises). Some 300 senior managers are scheduled to participate in the programs from September 1992 to September 1993.

Ukraine will also be the first Central and Eastern European state to effect affirmative action for women, Dr Krawchenko told *Folio*. In the MPA program, "a quota of 25 percent of student places are being reserved for women to quickly start correcting a situation where only some two percent of senior bureaucratic posts are occupied by women."

The MPA program will focus on training generalists who will become the state's new policy elite, Dr Krawchenko said.

In addition to being Director of the Institute, Dr Krawchenko is Director of the Centre for Policy Studies, Council of Advisors to the Parliament of Ukraine; Chair of the Executive Committee, Renaissance (Soros) Foundation, Kiev; Coordinator, Social Policy Studies, World Bank Mission in Ukraine; and co-editor of *Politolohichni chytannia* (*Readings in Political Science*), Ukraine's first political science journal.

The Institute's teaching staff includes both Western and Ukrainian specialists, all of whom are on one- or two-year contracts. Assisting Dr Krawchenko, whose appointment is for one year, are Volodymyr Svintsitsky, formerly a professor of cybernetics and management at the Kiev Institute of the National Economy, and Volodymyr Oksamytny, who was senior researcher of comparative law at the Institute of State and Law, Ukrainian Academy of Sciences.

The Institute is housed in a modern four-storey building in Kiev and has a residence for 200 people attached to it.

Merger Continued from page 1

Acknowledging that he has received a letter from the Academic Women's Association concerning the academic careers of women, the Vice-President said he and the President are committed in the restructuring process to protecting tenure and people in tenure-track positions. That's probably the most important safeguard, he said.

There is a general perception on campus that restructuring affects women more than men, Dean Crown said. "I would be remiss if I didn't say that at the beginning of our discussions about merging with the Faculty of Agriculture, some of our staff shared some of the same concerns that Ms [Rita] Egan [who raised the gender issue at GFC] has suggested, that we would be submerged and be going into a Faculty dominated by males. In our subsequent discussions, we have discovered that is not really the case."

A number of academic problems were identified. The Faculty of Agriculture and Forestry has a low undergraduate enrollment. There was pressure to move Foods and Nutrition out of the Faculty of Home Economics. According to the Vice-President (Academic), the Faculty of Home Economics appeared about to split up. Foods and Nutrition had developed in a direction different from the original intent and it had become a strong basic science department. "If this department splits from the Faculty, the remaining departments, Family Studies and Clothing and Textiles, would not be able to maintain the student programs," he outlined.

A number of speakers at GFC wondered what the new Faculty would offer, and just

what a "reconceptualized structure" would look like. Dean Tyrchniewicz said, "We have to be aware of changes in society, and in the Faculty of Agriculture and Forestry we are re-focusing our efforts [towards] a greater understanding and recognition of environmental issues, globalization and a move away from the notion of agriculture being essentially about farming." He said there will be a greater emphasis on applied sciences.

Dr McDonald pointed out that the objective of the merger is to create new and improved academic units.

Dean Crown said some of the recommendations indicate part of the new structure—the merger of some of the departments. A reconceptualized structure is not in place yet, but will be evolving.

"One of the things the restructuring committee spent a great deal of time thinking about had to do with the extent to which we academics in university spend a lot of time defining little cubbyholes for ourselves to feel comfortable in and then try to protect our turf," said Dr McDonald. "From the point of view of the students, I don't think they care where the faculty members live or what department or program they're in. What they do care about is that we find a way to bring all of the expertise that we have to bear on a particular subject area."

Alastair Small (Classics) said, "It's quite obvious why Food Science and Foods and Nutrition should be put together, but not at all obvious why Family Studies and Clothing and Textiles should go into Agriculture and Forestry."

Public Affairs Director becomes Director of Development

Margaret (Meg) Clarke, Director of the University's Office of Public Affairs since June 1988, has left that position to take up the directorship of the Office of Development. Her new appointment, announced by John McConnell, Vice-President (Development and Community Affairs), began 1 June.

As Director of Development, Clarke is responsible for planning, implementing and evaluating fundraising programs to increase private gifts to the University. (She was Associate Director of Development from 1984 to 1988, and had a lot to do with the Faculty of Business's "Competitive Edge" campaign, the Faculty of Medicine's "Preparing Physicians for the Future" campaign, and the campaign for the development of the Kurimoto Japanese Garden.)

During her tenure with Public Affairs, Clarke helped initiate a number of commu-

nity relations activities, including Super Saturday, a day of informal lectures for the public given by University professors.

Clarke holds a BA degree from the University of Kansas and an MA from the University of Chicago. She is an executive member of the Canadian Council for the Advancement of Education and sits on the District VIII Board of the Washington, D.C.-based Council for the Advancement and Support of Education. An active member of the community, Clarke is a former president of the Edmonton Symphony Society (1982-84) and a director of the Association of Canadian Orchestras. She is a member of the Glenora Rotary Club.

Vice-President McConnell will be Acting Director of Public Affairs until Clarke's successor is appointed. A search for that individual is under way.

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Display advertisements: 3 pm Thursday, eight days before desired publication date. Camera ready artwork is required to size, complete with halftones if necessary. Contact Public Affairs for sizes, rates and other particulars.

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Distance education at U of A takes another step into the future Province/University collaborating on project

Students living outside Alberta's major urban centres will be able to tap educational resources through videoconferencing facilities without having to make hitherto extraordinary sacrifices.

A pilot project involving the University of Alberta's Distance Education Program and the provincial government allows the University to use the government's only videoconferencing facility here in Edmonton.

Alberta Transportation and Utilities Minister Al Adair said Albertans will be able to pursue a graduate degree or enhance their education while remaining with their families and jobs in their home communities. "At the

same time, we can assist by offering the use of our facilities outside of peak demand time."

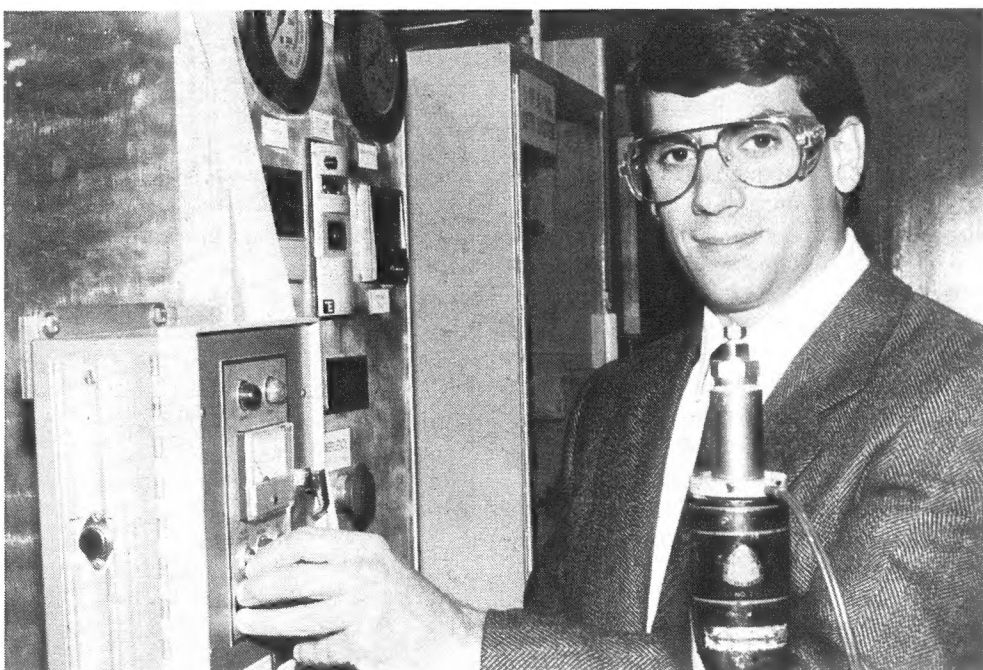
Credit classes from the Faculty of Nursing and a continuing education program for pharmacists will be using the facilities during this spring term phase of a pilot program between Edmonton and Red Deer. Courses in nursing, educational administration and adult, career and technology will be offered this fall.

"I am excited by the willingness of all participants to make this project a reality in record time," said Dianne Kieren, Associate Vice-President (Academic). "This good idea is already making an impact on students. At a time of limited resources, this partnership

was made possible by a cooperative University/Province effort, and students are the beneficiaries."

This isn't the first time videoconferencing has been used by the University to deliver courses. The Faculties of Nursing and Extension have conducted courses using AGT's videoconferencing facility.

The growing demand in Red Deer for graduate education in nursing has resulted in the University offering Master's of Nursing courses in the pilot project. Student demand and funding will determine if the entire master's program will be offered in Red Deer using the technology.



Graduate student Alan Ayasse operates the University/Syncrude hydrocracking laboratory.

Syncrude, University strengthening an already solid relationship

Chemical Engineering Department willing partner

Syncrude Canada Limited is serious about research, and it's doing something about it both in-house and with the University of Alberta's assistance.

On hand last week to officially commission the joint University of Alberta/Syncrude hydrocracking laboratory, Syncrude's manager of research John Clark said the type of fundamental work to be conducted in the lab will address problems, not just on Syncrude's behalf, but on behalf of the entire industry and province.

Clark said it's been a disastrous year in the oil patch, and all the major companies are restructuring. "Fortunately, our owners are still committed to doing research," he said, predicting that industry players will move towards a more cooperative approach to research. "There'll be a lot more sharing and joint work among industry players. I hope joint industry, government and university collaboration will continue."

Syncrude has signed a research contract with the Department of Chemical Engineering and will fund the work conducted by graduate student Alan Ayasse. The department and Syncrude have also jointly developed the research infrastructure for the hydrocracking laboratory. Equipment is on loan from Syncrude and some University equipment has been modified by the department's machine shop. Syncrude's analytical lab will help separate and analyze products from the experiments.

The objective of the joint project, entitled "Kinetics of Sulphur and Nitrogen Removal in Bitumen Hydrocracking," is to obtain fundamental data on the kinetics and mechanisms of catalytic hydrocracking of Athabasca bitumen. The emphasis of the initial studies will be on the removal of sulphur from the bitumen.

"The project has important commercial potential for Syncrude," said Vice-President (Research) Bob James, who noted that the joint project is an example of the type of project that the University should become more involved in.

Ayasse's advisor (and Department Chair) Murray Gray said the project is unique, and this is the only research group in the world that has such a facility. He, too, lauded the willingness of Syncrude and the University to develop infrastructure together.

Syncrude produces about 15 percent of the Canadian crude oil supply from the Atha-

basca tar sands. Several processes are involved before the product reaches the market. One of those processes, catalytic hydrocracking, involves using hydrogen and catalytic reactions to convert viscous bitumen into lighter products and some of the sulphur, nitrogen and vanadium is removed.

A process unit to do that was started in 1988, but the company still has a number of fundamental questions about how the reactor functions. Syncrude wants to explore ways of reducing the costs of operation and is hopeful University researchers will provide some fundamental information to help it do that.

Eight percent of those surveyed report they've had unwanted sexual experience

While enrolled at the University of Alberta

Seventy-eight students—approximately eight percent of the total sample—in a recent survey of unwanted sexual experiences among University of Alberta students reported an unwanted sexual experience while enrolled at the U of A.

According to the research report prepared by Dave Odynek and Harvey Krahn of the Population Research Laboratory for the Council on Student Life, more than half of these individuals reported more than one incident. In 55 percent of the incidents, sexual intercourse took place.

Self-administered questionnaires were completed in class by a sample of 1,016 undergraduates in late 1991 and early this year. While the sample was nonrandom, an attempt was made to include a broad cross section of students by selecting classes of varying size in different Faculties, Dr Krahn explained.

Only a few of the incidents involved outright threats of violence. Much more often, the report states, continual pressure and argument led to the victim finally giving in to the person desiring sex. About four out of 10 sample members reported that at some point in the past another person had tried to initiate sexual activity (sex play, sex acts, or sexual intercourse) with them when they did not wish to participate. Three-quarters of these students were women.

Fifteen percent of the students in the study admitted that at some point in the past they had tried to have sex (broadly defined) with someone else who did not wish to participate. Seven out of 10 were men.

According to Susan Elliot, who designed the study under the supervision of Judith

Golec (Sociology) and Dr Krahn, the study, when compared to a national study conducted in the United States, indicates significantly fewer people reporting an unwanted sexual experience. The more familiar the victim is with the aggressor, the less likely the victim is to report the incident, she explained at a recent Council on Student Life meeting.

Thirty-one percent of the respondents said the U of A has a problem with sexual assault on campus and 84 percent agreed that the University should provide a Sexual Assault Centre where students could receive information and counselling.

Almost half of the students who reported an unwanted sexual experience while registered at the University stated that the other individual involved was a romantic acquaintance. About one in five said the individual was a casual or first date, while 29 percent said the individual was a nonromantic acquaintance (friend, neighbour, classmate or roommate). More than half indicated that they had not been involved in any previous sexual activity with this individual. But one-third of the victims stated that, at some previous time, they had willingly engaged in sexual intercourse with this other person.

Eighty percent of the unwanted sexual experiences took place off campus. In 40 percent of the cases, the victim had consumed alcohol and/or drugs. A similar percentage (44 percent) reported that the other person had consumed alcohol/drugs. With the exception of close acquaintances (friends, spouse/partner, girlfriend/boyfriend), who tended to be supportive, these victims did not talk to others about the experience. More than 90 percent stated that they had not talked to family members, roommates, campus security, police, or various campus-based and off-campus counselling agencies.

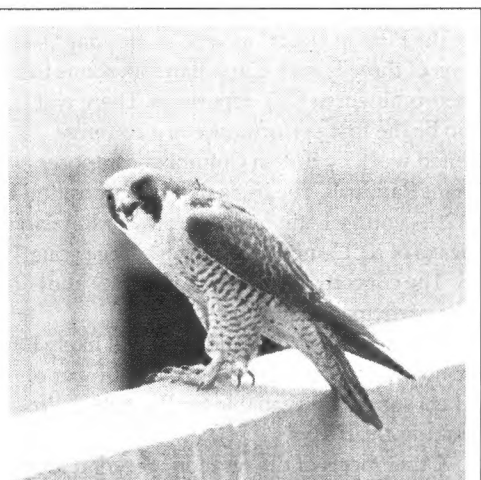
Yolanda Slagmolen, Students' Union Vice-President (Internal), said she noticed that 48 percent of the respondents were either in their first year or had completed one year. Might the percentages be higher, she asked, with a greater percentage of more senior students? Dr Krahn said if only those who had left the University had been sampled, "I suspect it would be higher."

The report will be referred to the Safety on Campus Committee for its consideration.

THE UNIVERSITY OF ALBERTA'S STRATEGIC PLANNING TASK FORCE INVITES SUBMISSIONS

For a copy of the *Key Issues Document*, contact:
Dr Peter Taitt
3-20 University Hall
Telephone: 492-3540
Fax: 492-1439

Public meetings
25 and 29 June
8-5 pm,
2-115 Education North



The female peregrine falcon nesting on the top of the Clinical Sciences Building has laid four eggs, each of which is fertile, says wildlife biologist John Folinsbee. Incubation for peregrine eggs is 32 to 35 days. Folinsbee, who checked the eggs at the beginning of the month, expects the chicks to hatch sometime between 16 and 18 June. Here, one of the falcons keeps a wary eye on intruders.

Gary Kelly, Nat Rutter among newest Fellows of Royal Society of Canada

Gary Kelly (English) and Nat Rutter (Geography) were inducted into the Royal Society of Canada, 21 May, on Parliament Hill. They and 55 other new Fellows were inducted into the three Academies of the Royal Society on the occasion of its 111th annual meeting.

Professor Kelly was inducted into the Academy of Humanities and Social Sciences. He took his degrees from the Universities of Toronto and Oxford. His first book, *The English Jacobin Novel*, is a major study in intellectual history as well as literary criticism, the Royal Society says. "His subsequent books, *English Fiction of the Romantic Period* and one on Mary Wollstonecraft, continue to explore literature in the light of the philosophical, political and social conditions of the time."

Currently a Killam Research Fellow, Professor Kelly is working on a multivolume project on women's writing of the 18th and 19th centuries.

Professor Rutter was inducted into the Academy of Science, Applied Science and Engineering Division. The Royal Society refers to Professor Rutter as "an outstanding and very active Quaternary geologist who is applying and promoting a multidisciplinary approach to solving Quaternary problems." Professor Rutter established the first amino acid dating laboratory in Canada and it is the only one that has fully evaluated the use of wood in aminostratigraphy. The producer of more than 140 publications in 22 years, Professor Rutter has contributed to several international projects and served as president of INQUA (International Quaternary Research Association) for the period 1987 to 1991.

Transmission electron microscope acquired by Physics Department

The smallest object the Physics Department's new transmission electron microscope can see is about one-fifth of a millionth of a millimetre. That's pretty tiny. "That also happens to be about the same size as an atom," says Ray Egerton (Physics).

The new instrument, purchased for considerably less than the \$700,000 list price with the assistance of a Natural Sciences and Engineering Research Council major equipment grant, "is near to the ultimate in terms of resolution at the present time," Dr Egerton says.

"Nothing beats electrons for resolving power," says Dr Egerton, who is interested in

electron microscopes, materials science and how information is acquired from the interaction of electrons with solids. "Of all the different techniques physicists and chemists have for getting images, electron microscopes have the highest resolution."

Transmission electron microscopes closely resemble optical microscopes, but instead of using light, they use a beam of energetic electrons. Transmission electron microscopes are used in industry for research and as a routine tool for quality control.

"I suppose if we really wanted to we could see single atoms with the new microscope," he

explains. "But most physicists and materials scientists are more interested in seeing the absence of atoms. In crystalline materials where millions of atoms are arranged regularly, it's the missing atom or row of atoms that provides the interesting information. That's what determines the properties of the material. Some of the work done on the machine will be to look at defects in materials. That's what most electron microscopists spend their time looking at."

The new machine will be used by researchers from across campus. Students who are adequately trained will also be able to use the instrument. Training is usually acquired on the job with people familiar with how the machine works.

The microscope has the highest resolution on campus, in part because it uses higher voltage. The normal transmission electron microscope uses 100,000 volts, but this machine, manufactured by Japan Electron Optics Laboratory Ltd, uses 200,000 volts.

"These microscopes are down to atomic resolution. It's technically getting more and more difficult to go any further," Dr Egerton says. A seminar, conducted 11 June by JEOL's Mike Kersker, explored just where the technology goes next and whether or not more information can be acquired with the technology.

"Providing you can make specimens thin enough for the electrons to pass through, then the electron microscope is very good at revealing the microstructure on a very fine scale,"



Physics Professor Ray Egerton, a member of the Microscopical Society of Canada (Alberta Section), at work on the department's transmission electron microscope.

Dr Egerton says. That thinning is done mechanically by precision grinding or chemically by using a jet of solution which etches away the material. Another method, ion beam thinning, involves firing ions in a vacuum onto a surface, knocking off atoms. There are combination methods as well.

CURRENTS.

Royal Glenora Club shares for sale

The University of Alberta has been left two (2) common shares of the Royal Glenora Club. Anyone interested in purchasing these shares is asked to call the Investment and Real Estate Office (492-4974).

Retirement reception for Martin Deinum

Martin Deinum, Assistant Manager, Building Services, will soon retire from the University of Alberta after 39 years of service. A reception in his honour will be held Saturday, 20 June, in 4-110 Education North from 1 to 4 pm (presentations at 2:30). Cost: \$10/single; \$17/couple. A light lunch will be served and there will be a no-host bar. Tickets are available from all Building Superintendents on campus. For further information, call George Thomlison at 492-4608.

'Midsummer Madness'

An afternoon of family entertainment and fun is planned for the Devonian Botanic Garden, 21 June, noon to 4 pm. "Midsummer Madness" will have children's activities, the Cosmopolitan Band, a bonsai display and fun races. Regular gate fees apply; these are: \$4 adult, \$2 student, \$10 family. Children under six will be admitted free.

The event is sponsored by the University of Alberta, the Friends of the Garden and the Devonian Garden Crafters Association. For more information, call 987-3054.

Retirement reception for Bill Jopling

Members of the University community are invited to attend a wine and cheese reception on Thursday, 25 June, from 2 to 5 pm in the Heritage Lounge, Athabasca Hall, to honour Bill Jopling, Director of Technical Services, on the occasion of his retirement.

Andy Liu singled out for Faculty of Science teaching honour

Andy Liu (Mathematics) is the 1991-92 recipient of the Faculty of Science Award for Excellent Teaching.

Dr Liu, who was announced as the award winner at a Faculty Council meeting 22 May, joined the University of Alberta faculty 12 years ago and his teachings have been absorbed by students in the Faculties of Business, Education, Engineering, and Science. These students as well as colleagues of Dr Liu are impressed by "the tremendous amount of work he puts into teaching, his ability to explain difficult concepts clearly, the sense of humour he brings to his teaching, and the genuine concern he has for his students."

Students are appreciative of, and often surprised by, the fact that after a week or so Dr Liu knows the names of everyone in the class, even though it may contain as many as 70 or 80 students. It's said that many students enroll in his class on the basis of his reputation.

When he was a graduate student at the U of A in the 1970s, Dr Liu voluntarily began offering Saturday classes for mathematically talented elementary and junior high school students. Since then these classes have continued every year with the exception of one year when Dr Liu was at the University of Regina. Many of the students attending his Saturday classes have done so for two or more years, some of them having since completed degrees in Mathematics, Computing Science, or Physics. Then, too, students at these classes have



Andy Liu, the winner of the Faculty of Science Teaching Award, has often coached the Canadian entry in the International Mathematical Olympiad and has been an assistant coach of the American team.

done original mathematical work which has appeared in scientific journals.

To quote one of Dr Liu's colleagues: "He has been able to take some of the most talented participants to levels of mathematical achievement they otherwise would certainly not have reached until several years later."

Full-throated reunion awaits Richard Eaton Singers

The Richard Eaton Singers take up their fair share in Edmonton's choral music annals, and on 26 and 27 June they will both reflect on their 40-year history and add a page or two to it. What's planned is a reunion weekend that has a concert at its mid-point.

It will be the first time that the adult community choir that's affiliated with the University's Department of Music has held a reunion.

Leonard Ratzlaff, conductor of the RES since 1981, will share the podium with Alexandra Munn, Larry Cook and Marc Hafso. Munn was conductor from 1967 to 1972; Cook succeeded her and stayed until 1981; Hafso stood in for Ratzlaff when the latter was on leave in 1987-88. The concert, scheduled for 26 June at 8 pm at All Saints' Anglican Cathedral, will include Renaissance music by Gabrieli, and selections from the oratorio repertoire. Richard Eaton was also a composer and arranger, and the choir will perform his "Blessed are the Pure in Heart" as well as his adaptations of three French-Canadian folk songs that are prominent in RES' repertoire. There will also be the first performance of a commissioned work by British Columbia composer Imant Raminsh. The basis of the composition is a 12th-century Latin hymn; Professor Ratzlaff speaks of a "13-minute piece on a large scale."

The concert will also contain a few audience participation numbers.

The majority of the audience will likely be former members of the RES, but a number of tickets should be available for the public, Professor Ratzlaff says.

Other facets of the reunion weekend are the unveiling of a plaque in memory of Richard Eaton, a tree-planting ceremony in the sculpture court near the Fine Arts Building and a Saturday evening banquet at the Convention Centre.

The Richard Eaton Singers began as an alumni choir of the University of Alberta, but now only 30-40 percent of the singers are alumni. With the Edmonton Symphony Orchestra, the choir performs at four pairs of con-



Leonard Ratzlaff

certs per season and gives one and sometimes two major concerts on its own. (Normally inactive during the summer, the choir will perform at the official opening of Edmonton's new city hall in late August.)

The RES average 130 singers per performance. Every three years a complete re-audition is held, with each singer asked to sing the same piece of music. It's time-consuming and it's less than beloved by most of the singers (some have opted to leave because of it), but Professor Ratzlaff feels it's necessary if the quality of the ensemble is to be improved.

One singer who takes it in stride is Bill Lauterbach. A teacher in Edson, he's been driving to Edmonton for rehearsals every Tuesday for some 20 years (and going through three cars in the process). "The amateur spirit is commendable," says Professor Ratzlaff, thinking of individuals like Lauterbach and the choir as a whole and its ability to raise money to finance tours of England (1981), Holland (1988) and, assuming all goes well, Germany in three or four years' time.



If the spy had had what Larry Wang's sampling, he wouldn't have had to come in from the cold.

Killam Annual Professor 'called to the bar'

Larry Wang certainly hasn't turned a cold shoulder to those who would have him talk about his invention.

He's been a guest on "Front Page Challenge" (the Canadian Cold Buster story stumped the panel although, in their defence, this was before the headline-making incidents with animal rights activists), greeted runners and fitness enthusiasts at Edmonton's Running Room store, and, in a talk called "From Lab Bench to Park Bench", taken the Visiting Committee to the Faculty of Science through the stages of development of the Cold Buster Bar. Next week, he will give the same talk to the Edmonton Council for Advanced Technology.

He was in Ottawa a few days ago to receive the Gordon Royal Maybee Award presented by the Canadian Institute of Food Science and Technology.

Professor Wang, one of six Killam Annual Professors (the award is for outstanding scholarship and teaching over three or more years and a substantial contribution to the community beyond the University) has also been generous about giving bars to virtually anyone who's had any sort of contact with him.

What's most gratifying for him, however, is when the bar proves its worth. In late February, Richard Smith, while following an historic Hudson Bay Company mail route from Bruderheim to Elk Point (about 140 kilometres east of Edmonton), had the misfortune of falling into the North Saskatchewan River. The temperature (-15) and wind dictated that he reach shelter before changing clothing and the closest spot was 2,000 metres away. He ate two Cold Busters before setting out and reached shelter with the loss of only 0.2 of his body temperature.

"I'm sure I wouldn't have been able to make that trip if I hadn't eaten the bars," Smith, an RCMP officer in Rocky Mountain House, told the *Edmonton Journal*.

On a less serious note, comments from athletes who train and compete in the dead of winter and construction workers whose jobs demand a certain imperviousness to cold indicate that the statement on the Cold Buster's wrapper—"A cold weather snack to provide energy to help keep your body warm"—is right on the mark.

Good things do come to those who wait. Especially if, like Professor Wang, they put in the work along the way. Some 15 years ago he became curious about how mammals, that is, gophers and ground squirrels, keep themselves warm in winter. That curiosity eventually centred on the finding of a combination of ingredients that could improve humans' ability to use fat to keep themselves warm.

"The Canadian Cold Buster's ingredients do two things for your body," Professor Wang says. "They will provide quick energy fuels to sustain a high rate of metabolism because of its high carbohydrate content and they will allow a better conversion of fat. Thus your body temperature does not drop as rapidly if you are exposed to the cold and there is the possibility of the product assisting in a weight control program." (The Cold Buster contains 154 calories. It does not contain artificial colouring agents, sweeteners or preservatives.)

Professor Wang is developing a worldwide market for the bar, and he recently announced the establishment of a joint-venture company, Beijing-Cannaton (in Beijing), to manufacture the bar in China. It should be available this fall.

Besides the Canadian Cold Buster, Professor Wang has also attracted scientific and public interest by involving the Chinese traditional medicine research program in looking for novel drugs in Chinese herbal medicines to help both in the context of metabolism, and lately in treating senile dementia.

ASTech AWARD NOMINATIONS SOUGHT

Nominations are invited for the third annual ASTech awards recognizing outstanding contributions to science and technology in Alberta.

Awards are available in the following categories: Innovation in Alberta science; Innovation in Alberta technology; Outstanding commercial achievement in Alberta science and technology; Outstanding contribution to the Alberta science and technology community.

Prizes to be contested are: The ASTech/IRAP Prize for Industrial Excellence and the ASTech Journalism Prize.

The awards committee, under the chairmanship of Bob Crawford, Acting Dean of Science, will be accepting nominations until 30 June. The winners will be announced at the annual ASTech Awards Gala, to be held 23 October at the Westin Hotel, Edmonton.

Boehm Acting Head of Student Counselling

Reinhild Boehm has been named Acting Director of Student Counselling Services. The appointment is for one year, starting 1 July. She will continue to serve as Director of Native Student Services.

"We hope to continue giving students the broadest help in their personal and academic lives," she said.

Nomination forms are available from the corporate affairs department of the Alberta Research Council; the public relations department of Alberta Technology, Research and Telecommunications; the Science Faculties at the Universities of Alberta and Calgary and the various economic development agencies throughout Alberta.

KOREAN TEACHERS VISITING, LANGUAGE PARTNERS REQUIRED

Twenty Korean teachers who teach English as a foreign language are coming to the University of Alberta this summer courtesy of a cultural and language program conducted by the Department of Secondary Education. The teachers, who are from Alberta's sister province of Kang Wan Do, are interested in meeting Canadians and sharing in a cross-cultural experience. Volunteers are being sought; they would spend four hours a week as language partners with the Koreans for four weeks (13 July to 7 August). Staff of the Korean Teacher Education Project are also looking for people who would be interested in billeting the Koreans and providing a Canadian homestay experience for the weekend of 24 to 26 July.

Anyone interested in being a language partner or in hosting one or more of the Korean teachers for a weekend is asked to call Susan at 436-8560 or Anne at 452-6758.

Tribute to Lawrence Smillie takes form of international symposium

Although still very actively engaged in research, Lawrence Smillie retired from a 35-year teaching career in August 1990. In celebration of his contribution to the field of protein structure and function, many of his graduate students, postdoctoral fellows and colleagues, past and present, will be participating in a symposium, 22 and 23 June, in the Department of Biochemistry, 227 Medical Sciences Building.

The sessions will be open to the public and all interested individuals are welcome to attend.

The scientific program will include the areas of muscle protein (regulation of contraction, phosphorylation, molecular engineering), enzymes (X-ray crystallography, nuclear magnetic resonance spectroscopy) and biotechnology (applied research, synthetic vaccines).

Among those who will take part in the symposium are Karen Welinder, University of Copenhagen; Fernando C Reinach, Universidade de Sao Paulo; Ray Lemieux and Neil Madsen, University of Alberta; Elke Lohmeier-Vogel, University of Calgary; Samuel Perry, University of Birmingham; and Alan Mak and Graham Côté, Queen's University.

Dr Smillie received his PhD from the University of Toronto in 1955, then came to the University of Alberta where he has been a member of the Department of Biochemistry for the last 37 years. During this period, he has served on many committees of the Medical Research Council of Canada, the Canadian Biochemical Society (he was president in 1974-75) and the University of Alberta. From 1982-89, he served on the editorial board of the *Journal of Biological Chemistry*.

Among the numerous honours bestowed upon Dr Smillie is election, in 1979, to Fellowship in the Royal Society of Canada.

In 1974, Professor Smillie, in conjunction with Cyril Kay (Biochemistry), was instrumental in bringing together a team of researchers from seven laboratories to form the Medical Research Council of Canada Group in Protein



Lawrence Smillie

Structure and Function. Currently, the principal investigators are Mike James and Zygmunt Derewenda (X-ray crystallography), Brian Sykes (nuclear magnetic resonance spectroscopy), Bob Hodges (peptide chemical synthesis), Charles Holmes (protein chemistry, phosphatase inhibitors), Dr Kay (hydrodynamic methods and spectral probes), and Professor Smillie (protein chemistry and engineering).

These scientists have been responsible for a number of scientific advances and are internationally renowned in their respective fields. As co-directors of the MRC Group, Drs Smillie and Kay won the Faculty of Medicine's Distinguished Scientist Awards in 1988.

Dr Smillie's major research interests have been in the fields of proteolytic enzymes of mammals and microbes and of the contractile proteins of muscle and nonmuscle tissues. Most recently he has been applying cloning methodologies, DNA hybridization and protein engineering techniques to investigate structure-function relationships of the contractile proteins.

BUSINESS, POLICY AND ADMINISTRATIVE STUDIES REVIEW

The area of business, policy and administrative studies at the University of Alberta is being reviewed. The major objectives of the review process are to determine existing areas of strength and excellence within respective courses and programs and to identify existing and potential relationships and linkages within, between and among programs that do exist. Teaching and research activities in the area are an important consideration for the University community as well as members of the public, related professions and groups, consumers, students and employers.

The Subcommittee on Business, Policy and Administrative Studies invites interested individuals and groups to make a one-page submission on their perceptions of the strengths and weaknesses of the current activities on campus and to comment on the need for a campus focus on public policy. For individuals interested in meeting with the subcommittee, short interviews will be conducted in October and November.

Please direct correspondence to: ES Brintnell, Chair, Subcommittee on Business, Policy and Administrative Studies, Faculty of Rehabilitation Medicine, University of Alberta, 2-64 Corbett Hall, Edmonton, Alberta T6G 2G4.

POSITIONS



The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities and women.

ACADEMIC

EMPLOYMENT EQUITY COORDINATOR, OFFICE OF HUMAN RIGHTS

The University of Alberta is seeking an individual to serve as an Employment Equity Coordinator within the Office of Human Rights.

The Office of Human Rights assists the University of Alberta to evolve an environment which values diversity in its staff and students and ensures that deserving people are not denied employment, learning or research opportunities for reasons unrelated to ability.

The Employment Equity Coordinator will be responsible for coordinating the development, implementation and ongoing modification of the University's plan for accomplishing employment equity. That plan will be a

blueprint for the removal of barriers to employment for aboriginal persons, persons with disabilities, members of visible minorities and women as they may be found in the University's employment practices and policies and for the creation of a campus climate which is clearly welcoming and which is reasonably accommodating to the special needs of members of these same four groups. The successful candidate will also be responsible for the implementation of a communications strategy by which the University community will be kept informed of the University's equity initiatives, will act as a consultant to University management at all levels of the organization on equity issues, and will participate in the development and delivery of training programs and workshops on matters related to the appreciation of diversity in the workplace. The Employment Equity Coordinator will also represent the University in respect of employment equity to the federal government.

The successful candidate will have or be able to quickly develop a high level of credibility among all constituencies at the University of Alberta; knowledge and preferably experience in the field of employment equity; outstanding skills in interpersonal communication analysis, problem solving, consultation, research and database management; and demonstrated ability to deliver public presentations to large and small groups.

This is a full-time Administrative Professional Officer position with an assigned 1992-93 salary range of \$37,143 to \$55,719.

Individuals interested in being considered for this position may apply in confidence by 19 June 1992 to: Mr Fran Trehearne, Director, Office of Human Rights, 1-11 University Hall, University of Alberta, Edmonton, Alberta T6G 2J9.

Letters of application should be accompanied by a *curriculum vita* and the names of three references.

SUPPORT STAFF

To obtain further information on the following positions, please contact Personnel Services and Staff Relations, 2-40 Assiniboia Hall, telephone 492-5201. Due to publication lead time and the fact that positions are filled on an ongoing basis, these vacancies cannot be guaranteed beyond 5 June 1992. For a more up-to-date listing, please consult the weekly *Employment Opportunities Bulletin* and/or the postings in *PSSR*. Positions available as of 5 June 1992.

The salary rates for the following positions reflect adjustments in accordance with the new classification system and pay plan.

CLERK STENO (Grade 5) (Part-time), Faculty of Business, (\$927 - \$1,149) (prorated)

SECRETARY (Grade 5) (Trust), Family Medicine, (\$1,855 - \$2,298)

ACCOUNTS CLERK (Grade 6) (Part-time/Term to 21 May 1993), Drama, (\$1,623 - \$2,024) (prorated)

ADMINISTRATIVE CLERK (Grade 6), Faculty of Extension (Land Economics and Real Estate), (\$2,029 - \$2,530)

MEDICAL STENO (Grade 6) (Trust), Medicine (Infectious Diseases), (\$2,029 - \$2,530)

OFFICE SERVICES SENIOR CLERK (Grade 6), Faculty of Agriculture and Forestry, (\$2,029 - \$2,530)

OFFICE SERVICES SENIOR CLERK (BENEFITS ASSISTANT), (Grade 7), Pension and Benefits Administration, (\$2,210 - \$2,769)

OFFICE SERVICES SENIOR CLERK (PENSION COORDINATOR), (Grade 8), Pension and Benefits Administration, (\$2,389 - \$3,011)

TECHNOLOGIST (Grade 8), Microbiology, (\$2,389 - \$3,011)

The following positions retain salary rates in accordance with the previous classification system and pay plan.

PUBLIC RELATIONS/PUBLICATIONS ASSISTANT II (Trust/3 Year Term), Faculty of Business (Contemporary Accounting Research), (\$1,966 - \$2,530)

MASS SPECTROSCOPIST, SPI SYNTHETIC PEPTIDES INC

SPI Synthetic Peptides Inc is looking for a Mass Spectroscopist with experience in peptide/protein analysis. Minimum education is an MSc or equivalent. This is a contract position for two months to train existing personnel. Salary is \$2,000 per month. Deadline for applications is 3 July 1992.

Forward résumés to: K Ens, SPI Synthetic Peptides Inc, 355 Medical Sciences Building, University of Alberta, Edmonton, Alberta T6G 2H7.

CLARIFICATION

In an article profiling law graduand Kerry Rittich (*Folio*, 29 May), it was mentioned that the Law Faculty would be introducing a part-time program in the fall. In fact, although the Faculty has approved the program, it has not been approved at other levels of governance within the University and the Faculty is not looking at implementing it this fall.

TALKS



ACCOUNTING

25 June, 10:30 am

Alan Mayper, University of North Texas, "Workpaper Review—Walking Through the Woods: Being Baffled by the First Tree? Last Tree? Or Observing the Forest?" 127 Business.

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

16 June, 4 pm

Michael Kawaja, Division of Molecular Immunology and Neuroscience, Mount Sinai Hospital, "Axon Regeneration in the Adult Rat CNS Using NGF-producing Fibroblasts." 5-10 Medical Sciences Building.

DIVISION OF BIOETHICS

16 June, 12:30 pm

Cathy Morrison, Social Work/Discharge Services; Paul Byrne, Director, NICU; Murray Robertson, Paediatrics; David Schiff, Paediatrics, "The Reality of Neonatal Cardiac Transplantation in 1992." 2F1.04 (Classroom D) Walter Mackenzie Health Sciences Centre. Cosponsors: The Bioethics Project, University of Alberta Hospitals.

CHEMISTRY

22 June, 11 am

Eckhard Leistner, Department of Pharmaceutical Biology, University of Bonn, Germany, "Biosynthesis of the Menadione Chromophore." E3-25 Chemistry Building.

COMPUTING SCIENCE

15 June, 3:30 pm

Horst Zuse, Technische Universität Berlin, "Measurement Theory and Software Metrics." 619 General Services Building.

EDUCATIONAL FOUNDATIONS

15 June, 1 pm

T McLaughlin, Cambridge University, "Ethos, Values and the School." 7-152 Education North.

16 June, 7 pm

T McLaughlin, "The Distinctiveness of the Catholic School." Faculty Lounge, St Joseph's College.

ENVIRONMENTAL RESEARCH AND STUDIES CENTRE

16 June, 7:30 pm

Patricia Chambers, National Hydrology Research Institute, Environment Canada, "Lime Additions to Irrigation Canals: Impact of Benthic Flora and Fauna." Main lounge, Meanook Biological Station, Athabasca. For information, call 675-4934.

23 June, 7:30 pm

Carol Fries, Environmental Manager, Alberta-Pacific Forest Industries Inc, "The Mill Environmental Program at Alberta-Pacific Forest Industries Inc." Main lounge, M-6, Meanook Biological Station, Athabasca. For information, call 675-4934.

FOOD SCIENCE

15 June, 2 pm

Michael Crawford, Director, Institute of Brain Chemistry and Human Nutrition, London, England, "Essential Fatty Acids and Their Role in Maternal Nutrition and Brain Development." 2J4.12 (Classroom F) University Hospitals.

16 June, 2 pm

Michael Crawford, "A Brief History of Evolution: The Origin of Life and the Human Brain." 2J4.02 (Classroom F) University Hospitals.

16 June, 7 pm

Michael Crawford, "Nutrition-related Disease: Implications for Future Food Policy and Health." 2J4.02 (Classroom F) University Hospitals.



ACCOMMODATIONS AVAILABLE

VICTORIA PROPERTIES - Experienced, knowledgeable realtor with Edmonton references will answer all queries, and send information. No cost or obligation. Call (604) 595-3200, Lois Dutton, Re/Max, Ports West, Victoria, BC.

RENT - Riverbend condo, Essex house. Two bedrooms, furnished, \$1,200. 1-31 August 1992. Western Relocation, 434-4629.

RENT - Saskatchewan Drive, two storey, five bedrooms, 3,000'. Spectacular. \$2,500. Western Relocation, 434-4629.

RENT - Saskatchewan Drive bungalow. Fully renovated, three bedrooms, nanny suite, garage. \$2,000. Western Relocation, 434-4629.

RENT - Greenfield, furnished, three bedrooms, den. Fifteen minutes to campus. 1-31 July 1992. Western Relocation, 434-4629.

RENT/SALE - Windsor Park north, three bedroom house. Garage, finished basement, available August. \$1,450 monthly / \$259,000, 481-6900.

SALE - Bungalow in Malmo, three bedrooms up, finished basement, fireplace, new carpets, double garage, \$141,900. Raymond Cheng, Royal LePage, 438-4700.

RENT - Belgravia two storey, furnished. Four bedrooms, study, basement bedroom, 2 1/2 baths, family kitchen, fireplace. September 1992 - June/July 1993. \$1,200/month. 438-2741.

RENT - Rooms for rent. Two bedrooms: one downstairs with adjacent bath, one upstairs. Occupants share house facilities, Bonnie Doon area. Immediate, \$250/month. Call owner, 592-2322 (collect), house 469-0957 (evenings).

RENT - Five bedroom executive home, 25 minutes from campus. Quiet crescent location, spacious yard backs onto park. 1 September - June/July 1993. Furnished, \$1,100/month. 492-4251, 460-2918.

RENT - Millcreek, steps from ravine, Strathcona. Two bedroom main floor house, large kitchen, living room, shared washer and dryer, deck, parking. \$750 includes utilities, lease. 439-1813.

RENT - Aspen Gardens, immaculate home with garage, all appliances. Fifteen minute bus to University. Prefer nonsmokers for one year. Available 25 August 1992. 434-5640.

RENT - Fully furnished, two bedroom home. Located between U of A and Southgate. Quiet neighborhood, easy bus access. \$800 total. July-August. 434-3152.

RENT - Deluxe, fully furnished, one bedroom condo. 18th floor river view, pool, sauna, adjacent to campus. Available immediately. 489-0893 evenings.

RENT - Tired of looking? Check this one! Southwest, immaculate, three bedroom townhouse. Five appliances, fireplace, 1 1/2 baths, full basement, near bus, parks and excellent schools. Reasonable rent. 492-3356 (days), 438-6422 (evenings).

RENT - Parkallen, four bedroom sabbatical home. 1 September 1992 - 30 June 1993. \$850/month plus utilities. 437-6930.

SALE - Riverbend, 95' x 150' ravine lot, lovely setting, beautiful view. Two storey, five bedrooms, den, family room, fireplace, 2 1/2 bathrooms, double attached garage. No agents. 434-0528.

RENT - Riverbend, spacious, four bedroom furnished home. Available 1 September 1992 for nine months. \$1,500/month. 435-2332, 492-5587.

SALE - Executive bungalow, Saskatchewan Drive. Atrium, sauna, jacuzzi, studio, security system. Lot 90 x 137, double garage plus single tandem. Vendor leaving province, will negotiate. Janice Duke, Royal LePage Realty, 437-7480.

RENT - Aesthetic, small two bedroom house, fifteen-minute walk from University. Available 1 June - 1 September. \$800 is negotiable. No smoking. Phone 436-1320.

RENT - Two blocks to campus, five bedroom classic house, \$1,100. 492-3696.

RENT - Quiet, three bedroom bungalow, furnished. No smokers/pets. Near University, \$750/month, available late August, one year. 435-6383.

RENT - Walk to University, executive, two bedroom, den, five appliances, fireplace, underground parking. No pets, \$1,050/month, immediate. 481-3513.

RENT - Furnished, luxury apartment in downtown highrise, central to all facilities. Two bedrooms, \$980/month, includes all utilities except phone. Available 15 October 1992 - 15 April 1993. Phone 488-3916.

RENT - Three bedroom home in Parkallen. 12 July - 16 August. Ideal for family, close to University. For more information, call 437-4316.

RENT - New, executive, 1,200', two bedroom. Superb city, river valley view, close to all amenities, University. 1 1/2 jacuzzi bath, five appliances, fireplace, garage. Tennis, golf course, four blocks. Immediate. 468-1579.

SUBLET - 1 September 1992 - 1 August 1993. Delightful, two bedroom in scenic Lavigne. Partially furnished, walking distance to University. \$650/month plus utilities. Jane, 439-7053, or message at 433-1131.

SALE - North Glenora, ten minutes University, great location. Three bedroom bungalow, new shingle roof, vinyl coated exterior, four appliances, single detached garage. \$117,500. Phone owner, 452-5692.

RENT - Unfurnished, four bedroom house. Two blocks from University, available 1 August 1992. 486-5541.

SALE - By owner, University area, Riverwind suite 1203W. Luxury setting with unparalleled view of river valley. Open house weekdays 5:30 - 7:00 pm. Price reduced. Recorded message with further details, 431-0090.

RENT - Riverbend, four bedrooms, family room, finished basement, near bus, schools. \$1,200/month, 1 July 1992, one year lease. 430-6802.

RENT - Fifteen minutes to University. New, 1,400' bungalow, furnished. Availability approximately September-May. Gilmet, 484-9781, or write 9641 151 Street, Edmonton T5P 1S5 for complete information.

RENT - Belgravia, walk to campus. Furnished, three bedroom bungalow, no smokers, no pets. September 1992 to May 1993. \$1,150/month. 437-6529 after 5 pm.

SALE - Lakefront, Wabamun, north shore, cozy cabin, 100' waterfront. Chris Tenove, Spencer Realty. 435-0808, 433-5664.

SALE - 7305 Saskatchewan Drive. Super location, terrific view. Large bungalow, lot 80' x 150'. Chris Tenove, Spencer Realty. 435-0808, 433-5664.

RENT - Three bedroom, semi-bungalow in Windsor Park. Two blocks from University, minimum one year lease, available 1 August. 433-5655 or 433-3860.

ACCOMMODATIONS WANTED

MATURE University employee available to housesit, previous experience. Phone Joanna, 433-8668 or 492-6365.

MATURE, professional male available to housesit starting July. 420-5620 (days), 461-0994 (evenings).

RENT OR HOUSESIT - July and August, two or three bedroom suite OR small older home. 469-1879.

NEEDED/SWAP - Place to stay July - 14 August in Edmonton. Teaching couple. Could swap spacious apartment in Frankfurt. Ray Morgenstern, Im Rosengartchen 114, 6370 Oberursel, Germany. Phone 0049-6171-23258. Fax 0049-6171-202172.

GOODS FOR SALE

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1988 CHEVROLET Astro mini-van. 57,000 km, excellent condition. \$11,000 obo. 439-2894.

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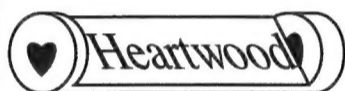
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MISCELLANEOUS

RESEARCH SUBJECTS - Native speakers of Canadian FRENCH with normal speech and hearing needed to read out loud: males and females, 9-85; \$10; 20 minutes. 492-1205 (Français); 492-0836 (Anglais).

RESEARCH SUBJECTS - Native speakers of Canadian ENGLISH with normal speech and hearing needed to read out loud: males, 9-19; males and females, 45-85; \$10; 20 minutes. Natalie, 492-7588.

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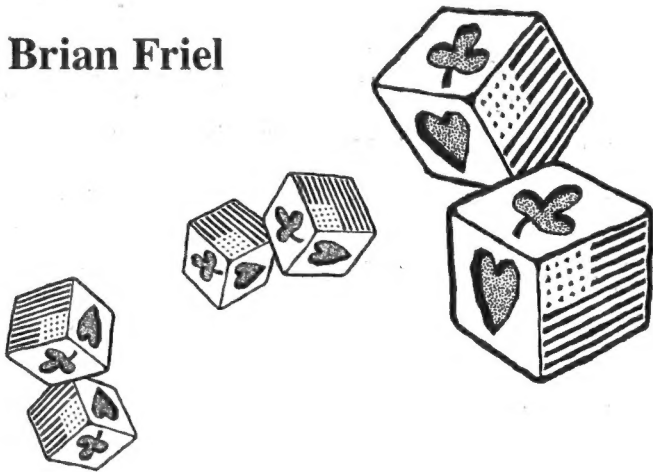
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